REMARKS

The Final Office Action dated September 2, 2009 indicated an objection to the drawings and listed the following rejections: claims 1-18 stand rejected under 35 U.S.C. § 112(1); claims 5 and 17 stand rejected under 35 U.S.C. § 112(2); and claims 1-18 stand rejected under 35 U.S.C. § 103(a) over Letavic (U.S. Patent No. 6,127,703) in view of Nakagawa (U.S. Patent No. 4,614,959). Applicant traverses all of the rejections and, unless stated by the Applicant, does not acquiesce to any objection, rejection or averment made in the Office Action.

Applicant respectfully traverses the § 112(1) rejections of claims 1-18 because these claims are in compliance with the written description requirement. The § 112(1) rejections are predicated on a misapplication of the written description requirement and the Examiner has improperly maintained these rejections despite the fact that Applicant has specifically indentified portions of Applicant's specification that provide support for the aspects of the claims asserted to be the basis for these rejections. *See, e.g.*, M.P.E.P. § 2163. The following discussion particularly addresses the impropriety of each of the § 112(1) rejections.

Regarding claims 1 and 13, the Examiner erroneously asserts that aspects directed to the field plate being connected to the gate electrode are not supported by Applicant's disclosure. Applicant previously provided the Examiner with a detailed explanation regarding support for these aspects. For example, paragraph 0021 of the published version of the instant application recites "the field plate 32 may be an extension, or connected to, the gate electrode 36 instead of the source region 42." The figures and the incorporated references further assist in an understanding of such an embodiment, with a multitude of connection options readily apparent. Moreover, amended FIG. 1 shows dashed lines with item number 37, as one exemplary manner in which to form such a connection. As such, the above discussed aspects of claims 1 and 13 are fully supported in compliance with the written description requirement. Applicant respectfully submits that the Examiner's apparent confusion regarding "how the gate electrode and the field plate could be connected together" does not rebut the clear support in Applicant's disclosure for the field plate being connected to the gate electrode. Applicant notes that claims 1 and 13 do not specify how the gate electrode and the field plate are connected

together and, as such, the Examiner has not presented any basis for a rejection under the written description requirement. The field plate and the gate electrode can be connected in any number of manners as would be readily apparent to the skilled artisan based on Applicant's disclosure, as discussed above.

Regarding claim 11, the Examiner erroneously asserts that aspects directed to a first one of said metallic regions in the field plate being connected to said source region and the remaining ones of said metallic regions being capacitively coupled to the first one of said metallic regions to linearly distribute a voltage at the source region across the field plate are not supported by Applicant's disclosure. Applicant submits that support for such aspects can be found throughout Applicant's disclosure including, for example, in Applicant's Figure 1 which shows field plate segment 52a connected to source region 28 and segments 52b being isolated from segment 52a. Paragraph 0016 of the published version of the instant application further states that

> Because of the isolation, unlike in the prior art where the voltage throughout the whole field plate is the same as the high voltage +Vs of the source region, the voltage in the field plate of the present invention is linearly distributed laterally. In other words, it drops linearly from the same high voltage +Vs of the source region 42 at its most left region (i.e., the region 52a) to a much lower value at the end of the field plate 52, i.e., at its most right region.

As such, the above discussed aspects of claim 11 are fully supported in compliance with the written description requirement. Applicant respectfully submits that the Examiner's apparent confusion regarding "how the voltage at the source region across the field plate could be linearly distributed" does not rebut the clear support in Applicant's disclosure for such aspects as discussed above. Applicant notes that the Examiner further discusses the gate electrode being on the path between the source region and the field plate, however, such aspects are not recited in claim 11 and, as such, do not form any basis for a rejection under the written description requirement.

Regarding claims 1 and 14, the Examiner erroneously asserts that aspects directed to the field plate including a first layer of plural metallic regions which are isolated laterally from one another so as to form a linear lateral electric field distribution in the lateral drift region are not supported by Applicant's disclosure. Applicant submits that support for such aspects can be found throughout Applicant's disclosure including, for example, in paragraph 0016 of the published version of the instant application which

discusses that there is a linear voltage distribution across the metallic regions 52a and 52b of the field plate. Paragraph 0018 of the published version of the instant application further states that

> The lateral drift region 32 is preferably provided with a linearly-graded charge profile over at least a major portion of its lateral extent such that the doping level in the lateral drift region 32 increases in a direction from the drain region 34 toward the source region 28. In such a situation, the field plate preferably has a lateral electric field distribution or profile that exactly follows the electric field in the SOI drift region 32.

The electric field profile in the field plate exactly follows the electric field profile in drift region 32, meaning that there is a linear lateral electric field distribution in the drift region 32. As such, the above discussed aspects of claims 1 and 14 are fully supported in compliance with the written description requirement. Applicant notes that the impropriety of the Examiner's further assertions regarding the claimed invention being inconsistent with an empirical relationship between an electrical field and voltage distribution was discussed in detail in the previous Response (incorporated by reference in its entirety) and is omitted here for the sake of brevity. Applicant further notes that the Examiner's assertions are not based on Applicant's disclosure being inconsistent with the claimed subject matter, which is clearly supported as discussed above. Thus, Applicant respectfully submits that the Examiner's assertions do not form any basis for a rejection under the written description requirement.

Regarding claims 17 and 18, the Examiner erroneously asserts that aspects directed to the lateral drift region including dopants arranged with a doping gradient that generates, in response to a voltage applied to the field plate arrangement, a linear lateral electric field distribution in the lateral drift region are not supported by Applicant's disclosure. Applicant submits that support for such aspects can be found throughout Applicant's disclosure including, for example, in paragraphs 0016 and 0018 of the published version of the instant application which discuss that the electric field profile in the field plate exactly follows the electric field profile in drift region 32 and that it is "the linearly-graded charge profile" in the lateral drift region 32 that causes such a relationship. Thus, there is a linear lateral electric field distribution in the drift region 32, as is discussed in further detail above in connection with claims 1 and 14.

In view of the above, the § 112(1) rejections are based upon erroneous interpretations of the claimed subject matter and/or an improper application of the written description requirement. Accordingly, Applicant submits that all of the § 112(1) rejections are improper and must be removed.

Applicant respectfully traverses the § 112(2) rejections of claims 5 and 17 because these claims do particularly point out and distinctly claim the subject matter which Applicant regards as the invention. In this instance, the Examiner has improperly equated breadth of the claims with indefiniteness. *See, e.g.,* M.P.E.P. § 2173.04 ("Breadth of a claim is not to be equated with indefiniteness."). The purported basis for the rejection of claim 5 is that claim 5 fails to clarify the relationship of the term "another dielectric layer' to the "insulation layer" of claim 1. Applicant notes that § 112(2) and applicable law does not require that the term "another dielectric layer" necessarily bear any specific relationship with the insulation layer recited in claim 1. Regarding claim 17, the Examiner asserts that claim 17 fails "to clarify what is the feature that is definitely responsible for the generation of the recited linear field in the drift region'. As such, the Examiner has again improperly equated breadth with indefiniteness. Accordingly, the § 112(2) rejections of claims 5 and 17 are improper and must be withdrawn.

Applicant traverses the § 103 rejections because the Examiner has not established correspondence to all claim limitations, including those directed to a field plate that linearly distributes voltage, or to a device that operates with a field plate (and related structure) that generates a linear electric field distribution in a lateral drift region. Generally, the Examiner's assertion that the electric field in the underlying drift region of the cited references "would have a lateral distribution that would be naturally substantially same as whatever the distribution is in the instant invention" is untenable. Nothing of record suggests that the cited drift region 32 of the '703 reference exhibits a linear electric field distribution. Moreover, in connection with the § 112(1) rejections the Examiner explicitly states that such a distribution could not be linear in asserting that "the field cannot be both simultaneously linear in any region" using a field plate as asserted in the '959 reference (*e.g.*, in accordance with independent claim 1 or with dependent claims 14, 15 or 18).

Specifically regarding the § 103 rejection of claim 13 and as applicable to the rejections of all claims, the Examiner has failed to show how the cited plate regions 6', 13' and 7' of the '959 reference would linearly distribute voltage when implemented in the '703 reference or otherwise. On the contrary, it appears that the plate layer 6' is at least four times wider than both of the plate layers 13' and further that the plate layer 7' has a width that is between the width of the plate 6' and plates 13'. Accordingly, it does not appear to be possible that the cited field plate layers of the '959 reference could linearly distribute voltage as claimed because the plate regions of different sizes would respectively effect voltage across varying lengths of underlying regions (*e.g.* the voltage drop would appear to be "stepped" relative to the varying lengths of the plate regions). As such, the Examiner's assertions of inherency with regard to the voltage distribution across the plate in the '959 reference are improper. *See, e.g.,* M.P.E.P. § 2112 ("Inherency, however, may not be established by probabilities or possibilities."). Thus, the Examiner has provided no explanation whatsoever as to how the voltage could be distributed as claimed. This is also consistent with the description of the claimed invention, which describes the use of plates spaced at specific intervals to achieve the claimed linear voltage distribution (*see, e.g.*, paragraphs 0019 and 0020 of the published version of the instant application). Accordingly, nothing of record suggests that the structure of the '959 reference as combined with the '703 reference would operate as in the claimed invention.

In view of the above, the § 103 rejections are improper because they have failed to establish correspondence to all claim limitations, including those directed to generating a linearly-distributed electric field (*e.g.*, independent claim 1) and to a field plate having a linear voltage distribution (*e.g.*, as in independent claims 1 and 13). Accordingly, Applicant requests that the § 103 rejections be withdrawn.

Applicant respectfully traverses the objection to the drawings because the objection relies upon an improper interpretation of the U.S.P.T.O. rules. Specifically, the Examiner erroneously asserts that the drawings "must show every feature of the invention specified in the claims." The definition of a feature is a prominent attribute or aspect of something. Rather than limit the cited rule to prominent aspects of the claims, the Office Action appears to take the position that the figures must provide a near word-for-word

correspondence to the claims. The Examiner's position, if applied to all cases, would ostensibly require that every patent application contain a near word-for-word replication of all language from the claims into the figures. Moreover, Applicant's position is also supported by a number of U.S. laws, U.S.P.T.O. rules and passages of the M.P.E.P. This support is largely inconsistent with the Examiner's position and will be discussed hereafter.

The Examiner's apparent interpretation of 37 CFR § 1.83(a) is contrary to the U.S.P.T.O. practice, U.S. law and the M.P.E.P. In support of Applicant's position reference is made to 35 USC § 113 and M.P.E.P. § 601.01(f), which indicate that "applicant shall furnish a drawing where necessary for the understanding of the subject matter sought to be patented." The authority for the U.S.P.T.O. to create rules such as 37 C.F.R. § 1.83(a) is derived from 35 USC § 113. Accordingly, 37 C.F.R. § 1.83(a) must be interpreted in light of this law to ensure that the U.S.P.T.O. does not exceed the statutory authority granted by the U.S. Congress. Moreover, M.P.E.P. § 608.02(e) clarifies how 37 C.F.R. § 1.83(a) should be interpreted and applied by an examiner: "The drawings are objected to under 37 CFR 1.83(a) because they fail to show [1] as described in the specification. Any structural detail *that is essential for a proper understanding of the disclosed invention* should be shown in the drawing." (*emphasis added*). This language is the suggested paragraph for an examiner that wishes to use a 37 C.F.R. § 1.83(a) objection. The Examiner conveniently has not used this language, choosing instead to ignore the second half of the suggested language.

Referring now to the claim language at issue, Applicant submits that support for the identified aspects can be found in Applicant's Figure 1 which shows a field plate (*e.g.*, portions 52a and 52b) on an insulation layer 38 with insulation layer 38 being above gate electrode 38 and the portion 52a is connected to the gate electrode by an exemplary connection shown by dashed lines 37. Thus, the drawings are sufficient to show the recited features in a manner that would provide one of skill in the art with a complete understanding of the invention. Applicant has also amended the specification to include a reference to numeral 37. Accordingly, the objection to the drawings is improper and Applicant requests that it be withdrawn.

In view of the above, Applicant believes that each of the rejections/objections has been overcome and the application is in condition for allowance. Should there be any remaining issues that could be readily addressed over the telephone, the Examiner is asked to contact the agent overseeing the application file, Peter Zawilski, of NXP Corporation at (408) 474-9063.

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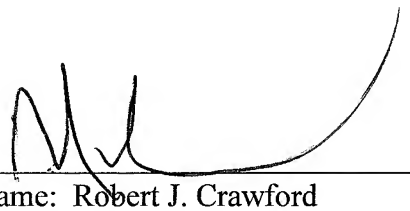
By: 

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